

## AUTOMATIC/MANUAL LONGITUDINAL POSITION TRANSLATOR AND ROTARY DRIVE SYSTEM FOR CATHETERS

### ABSTRACT OF THE DISCLOSURE

5 An automatic pullback catheter system (2) includes a disposable catheter assembly (6) mountable to a drive assembly (4). The drive assembly includes a body (8) to which a drive chassis (14) is mounted for movement along a longitudinal path (16) by a motor (20) which rotates a longitudinal drive screw (22) selectively coupled to the drive chassis by a threaded clamp (24). A rotary drive motor (30), mounted to the drive chassis, rotates a first combined connector (34). The catheter assembly includes a hollow sheath (38) housing a rotatable and axially movable cable assembly (44). The sheath includes a proximal hub (42) mountable to the body. The cable assembly includes an elongate imaging cable (46) with a second combined connector (36) at its proximal end. The first and second combined connectors are blind matable connectors and provide for the longitudinal movement coupling, the rotary movement coupling and the data/information connection of the two connectors.

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